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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/921,393	08/02/2001	Ole Droz	112740-273	5984
29177	7590	03/10/2005	EXAMINER	
BELL, BOYD & LLOYD, LLC P. O. BOX 1135 CHICAGO, IL 60690-1135			HAILE, FEBEN	
			ART UNIT	PAPER NUMBER
			2663	

DATE MAILED: 03/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/921,393

Applicant(s)

DROZ, OLE

Examiner

Feben M Haile

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 0810212001 ? 0212712002
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claims 1-3 & 19 are objected to because of the following informalities:

Regarding claims 1 & 19, on lines 3-4 the words “can be” should be deleted and the word -are- should be added.

Regarding claim 2, on line 3 the words “can be” should be deleted and the word -are- should be added.

Regarding claim 3, on line 2 the words “can be” should be deleted and the word -are- should be added.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-6 & 8-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Hoffmann (US 2002/0054586).

Regarding claims 1 & 19, Hoffmann discloses the limitations: providing a signaling unit having at least two line units which can be connected to one another and which can be used to set up a connection for transmitting user

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data (figure 1 units 48, 50 & 62 and page 3 paragraph 0040; data from a telephone network 14 is transmitted through an IP bearer 62, that includes exchanges 48 & 50 that communicate with each other, and then to telephone network 16); transmitting the user data in data packets via network nodes of a network (figure 1 units 28 & 42 and page 3 paragraph 0041; IP bearer 62 includes interworking units 28 & 42 where voice data is divided into data packets); terminating, via the line units, signaling toward a terminal device involved in the data transmission (figure 2 units 48 & 50 and page 4 paragraph 0045; exchange 48 causes service-providing computer 52 to send a connection setup message to the interworking unit 28); and passing on signaling messages, arriving at one of the line units for switching of the data packets, to another of the line units with the aid of internal signaling messages defined for the signaling unit (figure 2 units 28 & 42; telephone network 14 sends a connection setup message to telephone network 16 through exchanges 48 & 50 with the help of create connection messages between units 48 & 28 and 50 & 42).

Regarding claim 2, Hoffmann discloses the limitations: providing a signaling unit having at least two line units which can be used to set up a connection for transmitting data (figure 1 units 48, 50 & 62 and page 3 paragraph 0040; data from a telephone network 14 is transmitted through an IP bearer 62 that includes exchanges 48 & 50 that communicate with each other and then to telephone network 16); transmitting the user data in data packets via network nodes of a network (figure 1 units 28 & 42 and page 3 paragraph 0041; IP bearer 62 also includes interworking units 28 & 42 where voice data is divided into data

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packets); terminating, via the line units, signaling toward a terminal device involved in the data transmission in accordance with a signaling protocol of circuit-switched transmission of user data (figure 2 units 48 & 50 and page 4 paragraph 0053; exchange 50 generates a message to exchange 48 in accordance with the ISUP protocol); and passing on signaling messages, arriving at one of the line units for switching of the data packets, to another of the line units with the aid of internal signaling messages defined for the signaling unit (figure 2 units 28 & 42; telephone network 14 sends a connection setup message to telephone network 16 through exchanges 48 & 50 with the help of create connection messages between units 48 & 28 and 50 & 42).

Regarding claim 3, Hoffmann discloses the limitations: wherein the line units can be connected to each other (figure 1 units 48, 50 & 58 and page 3 paragraph 0038; exchanges 48 & 50 are connected by a link 58 that is used for transmitting messages to each other)

Regarding claim 4, Hoffmann discloses the limitations: wherein the line units can be connected via a switching network which transmits the internal signaling messages via one of channels, a bus system and a data network (figure 1 unit 62 and page 3 paragraph 0042; within the IP bearer 62 the exchanges 48 & 50 transmit messages to interworking units 28, 32, 42 & 46 within the IP bearer 62 through an IP network 10).

Regarding claim 5, Hoffmann discloses the limitations: controlling the connection of the line units according to a connection destination (page 4 paragraph 0048; the connection setup messages between the exchanges and

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the interworking units contain information elements including addresses, port numbers, and a circuit identification code).

Regarding claim 6, Hoffmann discloses the limitations: using at least one signaling message to transmit an information element (page 4 paragraph 0048; a connection setup message contains information elements), wherein the information element contains at least one of an address at which one of the terminal device and a network inter-working unit can receive data packets on the terminal device side (page 4 paragraph 0050; the Internet address in the connection set up message is used for the reception of data by the interworking units); a port number which designates a receiving unit of one of the terminal device and the network inter-working unit (page 4 paragraph 0050; the port number in the connection setup message is used for the reception of data by the interworking units), and a coding identification which designates a type of coding used sending data packets to one of the terminal device and the network inter-working unit (page 4 paragraph 0048; a circuit identification code identifies that the setup for the telephone connection through the interworking units is the Internet).

Regarding claim 8, Hoffmann discloses the limitations: wherein at least one of the line units involved in the connection set up operates toward the outside in accordance with an ISUP protocol (figure 1; the connection setup messages between terminal A and exchange 48 & terminal B and exchange 50 uses the ISUP protocol).

Regarding claim 9, Hoffmann discloses the limitations: wherein at least one of the line units involved in the connection set up operates toward the outside in accordance with a supplemented ISUP protocol (figure 1; the connection setup messages between terminal A and exchange 48 & terminal B and exchange 50 uses the ISUP protocol), and the process further comprises the step of using at least one information element for transmitting at least one of an address at which one of the terminal device and a network inter-working unit in the packet-switched network can receive data packets (page 4 paragraph 0050; the Internet address in the connection set up message is used for the reception of data by the interworking units), a port number which designates a receiving unit of one of the terminal device and the network inter-working unit (page 4 paragraph 0050; the port number in the connection setup message is used for the reception of data by the interworking units), and a coding identification which designates a type of coding used when sending data packets to one of the terminal device and the network inter-working unit (page 4 paragraph 0048; a circuit identification code identifies that the setup for the telephone connection through the interworking units is the Internet).

Regarding claim 10, Hoffmann discloses the limitations: wherein at least one of the line units involved in the connection set up terminates the signaling in accordance with a signaling protocol for a packet-transmitting data network device (figure 2 units 48, 50, 28, & 42 and page 4 paragraph 0045; the service-providing computers in the exchanges 48 & 50 generate Create Connection

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(CRCX) messages for the interworking units 28 & 42 using the RFC2705 standard).

Regarding claim 11, Hoffmann discloses the limitations: wherein the signaling protocol is a protocol for signaling with a terminal device (figure 2; page 4 paragraph 0045; Create Connection (CRCX) messages between the exchanges 48 & 50 and interworking units 28 & 42), the protocol being one of an H.323 protocol, an SP protocol, and an MGCP protocol (page 2 paragraph 0023; the CRCX message is a RFC2705 standard, which includes the MGCP protocol).

Regarding claim 12, Hoffmann discloses the limitations: transmitting data packets, via the signaling protocol, on a lower protocol layer (figure 2 units 14, 48, 50, & 16 and page 3 paragraph 0037-0039; data between each of these units is transmitted using an ISUP protocol, which is a lower protocol); and, transmitting signaling messages, via the signaling protocol, originally defined for a circuit-switch transmission network on an upper protocol layer (figure 2 units 48, 50, 28, & 42 and page 4 paragraph 0045; the service-providing computers in the exchanges 48 & 50 generate Create Connection (CRCX) messages for the interworking units 28 & 42 using the RFC2705 standard, which is a higher protocol).

Regarding claim 13, Hoffmann discloses the limitations: wherein at least one of the line units involved in the connection set up involves a control unit and a network inter-working unit in the switching operation (figure 2 units 48 & 28 and page 4 paragraph 0054; the control unit of exchange 48 forwards connection parameters to the interworking unit 28), and wherein, in the network inter-working

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unit, after the connection set up, at least one event occurs between removing the user data of the connection from time slots and distributing the user data among data packets (figure 2 unit 28 and page 5 paragraph 0060; interworking unit 28 receives voice data from telephone network 12 and transmits it in data packets according to the RTP protocol to interworking unit 42), and disassembling the user data of the connection from received data packets and passing the user data on in time slots (figure 2 unit 42 and page 5 paragraph 0060; interworking unit 42 receives the data from interworking unit 28 and transmits it again to telephone network 16 in time slots).

Regarding claim 14, Hoffmann discloses the limitations: wherein the at least two line units involve different control units (figure 2 units 48 & 50 and page 4 paragraph 0048 and 0054; each of the exchanges 48 & 50 have a control unit).

Regarding claim 15, Hoffmann discloses the limitations: wherein one line unit contains at least two component units which exchange internal signaling messages with one another (figure 2 units 48 & 52 and page 4 paragraph 0054; the exchange 48 has a control unit that extracts parts of a message and a service-providing computer that forwards these extracted parts).

Regarding claim 16, Hoffmann discloses the limitations: wherein the user data are passed on in one of a connection list mode by network nodes of the packet-transmitting network in accordance with an IP protocol, and a connection-oriented mode by the network nodes of the packet-transmitting network in accordance with the ATM protocol (figure 1 unit 10 and page 3 paragraph 0040; data between the two telephone networks is transmitted through the Internet).

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Regarding claims 17 & 18, Hoffmann discloses the limitations: at least two line units which are used to set up a connection for transmitting user data in data packets (figure 1 units 48 & 50 and page 3 paragraph 0040; data from a telephone network 14 is transmitted through an exchange 48 to the Internet 10 through another exchange 50 back to another telephone network 16); and at least one terminal device wherein the line units terminate signaling toward one of the terminal devices involved in the data transmission (figure 2 units 28 & 28 and page 4 paragraph 0045; the exchange 48 causes the service-providing computer 52 to send a connection setup message to the interworking unit 28), and signaling messages arriving at one of the line units are passed on to the other of the line units with the aid of internal signaling messages defined for the signaling unit (figure 2 units 28 & 42; telephone network 14 sends a connection setup message to telephone network 16 through exchanges 48 & 50 with the help of create connection messages between units 48 & 28 and 50 & 42).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffmann (US 2002/0054586).

Regarding claim 7, Hoffmann discloses the limitations of independent base claim 1.

Hoffmann, however fails to teach the limitations: using further line units for switching user data in a circuit-switched network; and processing, via the further line units, at least similar internal signaling messages as the line units involved in setting up the connection for the transmission of user data packets.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to amend Hoffmann's IP bearer 62 to include another exchange unit. The motivation being a third exchange would increase the calling area of the telephone network allowing for more diverse communication between subscribers.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

a) Havens (US 20040184446), Changing Quality of Service for Voice Over IP Calls

b) Shankar et al. (US 6768733), Communicating Voice Over a Packet-Switching Network

c) Gilchrist et al. (US 20030231622), Communications Link for Common Channel Transmissions Through a Packet Switched Network

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Feben M Haile whose telephone number is (571) 272-3072. The examiner can normally be reached on 6:00am - 3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


RICKY NGO
PRIMARY EXAMINER

3/7/05